Phase 2 – VA Validation Protocol Research

A Memorandum of Understanding (MOU) was signed between the Veterans Health Administration (VHA) and Centers for Medicare & Medicaid Services (CMS) to work together to improve the MDS 3.0 on December 31, 2003. In October, 2004 national VHA Health Services Research and Development (VHA HSR&D) initiated a large research project entitled "Pilot Testing and Validation of Changes to the Minimum Data Set (MDS) for Veteran Administration (VA) Nursing Homes" that aims to contribute to the MDS 3.0 revision. The VHA is a leader in electronic health records and quality improvement. Through this project a research consortium of nationally recognized leaders in long term care was created to pilot test and evaluate whether MDS 3.0 item related to diagnostic coding, delirium, pain, falls, mood, behavior disorders, quality of life, and palliative care has adequate validity to support efficient screening and support for individual care planning. Onsite national validation activities were delayed to align MDS work with this research This alignment allows the validity of these items to be further tested in a national sample of VA and community nursing homes (NHs).

This phase includes revising the items to incorporate the stakeholder feedback from phase I, further literature review, work with Health Services Research and Development (VHA HSR&D) and Assistant Secretary of Planning and Evaluation (ASPE) contractors on standardized nomenclature, development and pilot testing of validation protocols, and ongoing feedback from stakeholders.

Veterans Health Administration Contributions
Improving the quality of nursing home care is a high priority within the VHA. The VHA is both a provider and purchaser of nursing home care, operating nursing homes throughout the United States and purchasing contract care through community nursing homes. As part of its ongoing efforts to meet the needs of NH residents, the VHA National Nursing Home Care Service has voluntarily implemented the MDS in its system of nursing homes.

Recognizing their common interests in improving the MDS and nursing home care throughout the nation, VHA and CMS signed a memorandum of understanding (MOU) to facilitate coordination of MDS revisions across the two agencies. This MOU allows two large federal agencies to work together in improving the care of nursing home residents.

The VHA HSR&D funded a large research project titled "Pilot Testing and Validation of Changes to the Minimum Data Set for VA Nursing Homes" that aimed to contribute to the MDS 3.0 revision. The national VHA nursing home research team, listed below, is coordinating with the RAND/ Harvard team.

Research Group	Key Personnel	General Area	Specific Topic Area
Bedford VHA & Center for Health Outcomes Quality and Economics Research	Dr. Dan Berlowitz Ms. Elaine Hickey, RN	Medical Conditions & Complications	Diagnostic coding Delirium
Atlanta VHA & VA Geriatric Research Education and Clinical Care	Dr. Joe Ouslander Dr. Pat Parmelee	Geriatric Syndromes	Pain Falls
Philadelphia VHA & MIRECC	Dr. Ira Katz Dr. Joel Streim Dr. Katy Ruckdeschel Ms. Suzanne DiFilippo	Mental Health	Depression Behavior Disorders
VHA Greater Los Angeles & Center of Excellence for the Study of Health Care Provider Behavior	Dr. Debra Saliba Dr. Karl Lorenz Dr. Josh Chodosh	Residential Life Quality Mental Status	Customary & routine Quality of life survey Pain and other Symptoms Goals of Care Mental Status Measures
Harvard Medical School	Dr. Joan Buchanan Dr. Alan Zaslavsky	Evaluation & Analysis	

The VHA HSR&D project evaluates, within VHA nursing homes, the validity and performance of nine new or revised sections of the Minimum Data Set (MDS). The 9 targeted sections are: diagnostic coding, delirium, pain, falls, depression, behavior disorders, quality of life, palliative care and mental status. The project design has 4 primary phases: 1) Refinement of candidate MDS items 2) condition-specific protocol development & pilot testing, 3) protocol integration and pilot testing, and 4) national VA validation & reliability testing. In the first phase, the 4 regional teams review provider feedback, convene additional work groups as needed, propose item revisions and identify common pilot elements for regional testing. In phase 2, each of 4 regional research groups develop, pilot test and refine MDS items and related validation protocols for 2-3 conditions. In the third phase (which coincides with CMS phase 3), the lead team is integrating the resulting 9 refined condition-specific protocols into the MDS and into national data collection protocols. The Colorado Foundation for Medical Care, a quality improvement organization, joins the four regional research groups to pilot test the resulting integrated protocol for feasibility and clarity. In the fourth phase (which coincides with CMS phase 4), the integrated protocols are used to test the revised items in a national sample of 20 VA NHs.

The VA National Nursing Home Research Collaborative pilot work has yielded important findings for several key sections of the MDS. These findings, which will be further tested in the community national sample, are summarized below.

Mental status assessment: A simple performance-based screen can be used by nursing home staff. The performance-based screen employs common cognitive questions and more accurate detects cognitive impairment than does the existing MDS staff assessment. It also provides important structure for assessing delirium.

Delirium: A standardized delirium assessment, validated in older hospitalized adults is feasible for use in the nursing home setting. Pilot study results show that clinical nurses, using the draft MDS 3.0 delirium items, had poorer results than research nurses using the validated confusion assessment manual (CAM). In addition, the 4-Item CAM has the advantage of a corresponding algorithm that can be used by the assessor to trigger the delirium RAP.

Mood: Direct resident interview for signs and symptoms of depression is feasible, even in residents with moderate cognitive impairment. This finding is consistent with multiple prior studies in nursing home settings. A newer finding was that the 9-item Patient Health Questionnaire (PHQ-9), required less time to complete and showed more internal consistency across varying levels of cognitive ability than did the Geriatric Depression Scale. The PHQ-9 is in wide use in community and hospital settings and this finding suggests that NHs could use the same depression screener as is employed in these settings.

Behavior: Improvements to these items allow clearer language, symptom grouping and consideration of the impact of behaviors. The revised behavior items had greater convergent and construct validity than did MDS 2.0 items.

Quality of Life: Cognitive interviews with residents revealed that asking for simple yes/no responses to questions about quality of life did not simplify questions for residents. Indeed, residents' narrative responses revealed significant discordance when compared to their yes/no answers. Residents were hesitant or refused to answer questions about the quality of their care when staff members were present. Residents were, however, willing and able to provide answers to questions about their daily preferences and activities. Residents with moderate cognitive impairment were able to respond to questions about the importance of particular quality of life domains and activities.

Balance: Abnormal balance and gait place residents at increased risk for falls. Training videos were developed to aid staff in assessing gait and balance during transfers and walking. Residents with varying gait and transfer ability were included. As part of the integration testing phase below, expert clinicians and nurses, who complete the MDS, are viewing the videotaped clips and rating balance using the relevant MDS 3.0 items.

Diagnoses: Diagnostic categories and diagnoses relevant to nursing home resident care planning were identified using prevalence data and expert input. Enhanced algorithms for identifying active diagnoses improved agreement between research nurses and clinical nurses. Administrative databases were found to have low accuracy (specificity) for identifying active disease when compared to gold standard chart review.

Pain: Direct resident interview for about pain is feasible, even in residents with moderate cognitive impairment. This finding is consistent with multiple prior studies in nursing home settings. Repeated surveys of residents with different

levels of cognitive impairment found that residents were able to report whether they had had pain in the preceding 5 days. A limited number of residents failed to report pain on the 5 day look-back but had reported on prior days. None of these residents had pain on more than 2 days during the look back period.

Falls: A revised MDS falls item for quarterly assessments had improved sensitivity for detecting falls, but a slightly lower specificity when compared to the 2.0 item. Facility nurses were able to use a revised item that asks about fall related injury to accurately code fall case studies.